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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,916	11/28/2001	Huub Van Aert	27500-14	1168

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EXAMINER

ZALUKAEVA, TATYANA

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 12/04/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,916

Applicant(s)

AERT ET AL.

Examiner

Tatyana Zalukaeva

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The recited "dimers" in claim 1 makes it not enabling to produce polymers as claimed because a person skilled in the art is not provided with the guidance as to what is polymerized, monomers or dimers, or those dimers are relevant to chain transfer agents along with cobalt complexes, since they are grouped in a Markush recitation together with cobalt chain transfer agents. Therefore a person skilled in the art would not be able to make and/or use the process as claimed without undue experimentation.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete idiomatic errors. The transitional word (i.e. between the preamble and the body of claim) "characterized and phrases incorporating it are common in applications of European origin. IN U.S. practice claims containing those words and phrases are rejectable under 35 USC 112.2 when characterization may connote more than mere description (dictionary definition); in scientific parlance characterization may imply one or more physical steps or procedures (e.g. structure determination, elemental analysis, or qualitative tests) to identify a product. Since it is rare that applicant intends more than a mere description when using this language, physical steps are rarely disclosed. As such the reader may be unsure about the meaning of the wording of the claims, and additionally the scope of the claim is often unclear ("characterized conveys no degree of openness). Usually these troublesome words or phrases can be replaced by the standard transitional words, "having", "comprising", "wherein" and the like. The recited "making use thereof" in claim 1 is indefinite because it is unclear as to what this use is referred to.

5. Further, in claim 8 Applicants recite "dimer, is a water soluble oligomer..." The dimer is already an oligomer containing two repeating units, therefore, a person skilled

in the art would not be reasonable appraised and have enough guidance on the metes and bounds of such.

6. Claim 12 provides for the use of hydrophobic latex particles and copolymers, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Applicants are advised that if amended as a method of using, claim 12 will be subjected to a restriction requirement.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

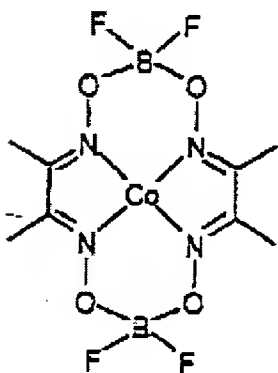
8. Claims 1-6, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/50436.

WO'436 discloses method for preparing latex polymer particles in a microemulsion polymerization method (abstract), in the presence of cobalt complexes as chain transfer agents (abstract). A variety of monomers is employed, such as styrene and derivatives, acrylic acid, acrylates and methacrylates, , hydroxymethylacrylonitrile, hydroxyethyl Methacrylate, etc., listed on page 2, lines 13-21. Examples of suitable cobalt chain transfer agents is cobaloxime boron fluoride (COBF), which is a chain transfer agent of the instant claims (page 2, lines 22-30). Aqueous solution may contain a surfactant, cationic, anionic or non-ionic. The preferred one is sodium dodecyl sulfate (page 2, lines 31-35). Tables 1 and 2 provide relative amounts of monomers, surfactants and COBF or CPhBF transfer agents with regard to the utilized monomers. As can be seen from the Table 1, the amount of SDS is within the claimed range, and the amount of added chain transfer agent is shown in Table 2, and such amount in combination with other polymerization conditions, provides for particles having sizes shown in Table 3 of page 9, which are clearly within the claimed range. With regard to the limitation of the instant claim 1. that the particle size obtained by the process of instant invention is 15% lower than that of a particle prepared without chain transfer agent, it is noted that such limitation does not impart any patentable weight to the claim, because the process of the instant claim 1 is readable on the process of WO'438, and even more the sizes of particles are clearly within the claimed range, therefore comparison with the process

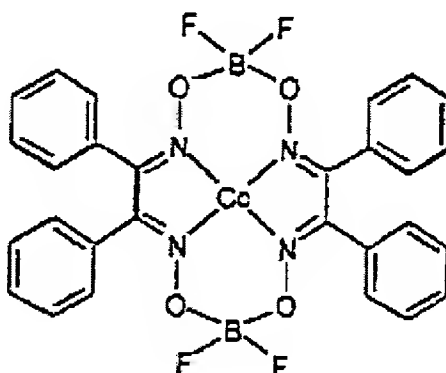
without CTA does not impose any additional limitation on the process. Nor does it distinguish the obtained product.

It is axiomatic that one who performs the steps of a process must necessarily produce all of its advantages. Mere recitation of a newly discovered function that is inherently possessed by the things or steps in the prior art does not cause a claim drawn to those things to distinguish over the prior art. Leinoff v. Louis Milona & Sons, Inc. 220 USPQ 845 (CAFC 1984).

The compounds of claim 6 are presented in WO'436 under slightly different names, however, they are the compound depicted by the instant Specification, and those instantly claimed



cobaloxime boron fluoride
(COBF)



tetra phenyl cobaloxime boron fluoride
(COPhBF)

Therefore, all the limitations of the instant claims are either expressly or inherently met by the disclosure of WO'436.

9. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/15158.

WO'158 discloses emulsion (co)polymerization of styrene and (meth)acrylic monomers in a presence of a cobalt complex as chain transfer agent and a surfactant to obtain a latex polymer (page 1, lines 15-35). Cobalt chain transfer agents are presented by generic formulas in page 2 and 3, as well as particular cobalt compounds of the instant claim 7 is named in lines 15-20 of page 3. Particular monomers are listed on page 5, lines 4-9 and are the monomers of the instant claims. Both ionic and non-ionic surfactants are utilized (page 5, lines 10-25). Examples 1-10 provided on page 7 show the concentrations of surfactant related to the monomers within the claimed range. Table 2 on page 8 shows the concentrations of surfactants within the claimed range, as well as the presence of cobalt complexes, identical to those of the instant claims and the particle sizes depicted by Examples 1 and 2 of the same table are within the claimed range.

10. Claims 1, 8 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Huybrechts (U.S. 6,174,953).

Huybrechts discloses graft and block copolymers, wherein the monomers are those as instantly claimed (abstract). The macromonomer is preferably formed in a solvent or solvent blend using a free radical initiator and a Co (II or III) chelate chain transfer agent, although it can be formed in aqueous solution or emulsion when using, for example, diaquabis (borondifluorodimethyl-glyoximato) cobaltate (II or III). Typical

solvents that can be used to form the macromonomer copolymer are aromatics, aliphatics, ketones (col. 3, lines 40-55). Polymers are useful as coating compositions (col. 4, lines 25-30). Examples 3-6 in column 7 provide the methods of making graft and block polymers in the presence of cobalt complexes obtained according to Example 1 in col. 6, the polymerization is conducted in the presence of detergent surfactant in the amount as instantly claimed. With regard to a particle size it is believed to be inherently the same based on rationale applied above in paragraph 8 of this Office Action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703)308-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

TATYANA ZALUKAEVA
PATENT EXAMINER



November 25, 2002

Tatyana Zalukaeva
Examiner
Art Unit 1713